

AN 1983:50011 CAPLUS

DN 98:50011

ED Entered STN: 12 May 1984

TI **Particle** agglutination assay

IN Masson, Pierre Lucien; Collet-Cassart, Daniel; Magnusson, Carl Gustav

PA International Institute of Cellular and Molecular Pathology, Belg.

SO Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DT Patent

LA English

IC G01N033-54

CC 9-2 (Biochemical Methods)

Section cross-reference(s): 1, 2

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 61857-	A1	19821006	EP 1982-301265	19820312
	EP 61857	B1	19851106		
	R: BE, CH, DE, FR, GB, IT, NL, SE				
	AU 8281247	A1	19820923	AU 1982-81247	19820310
	AU 548003	B2	19851114		
	JP 57206859	A2	19821218	JP 1982-40319	19820316
	JP 05000665	B4	19930106		
	CA 1174596	A1	19840918	CA 1982-398498	19820316
	US 4427781	A	19840124	US 1983-358566	19830124
PRAI	GB 1981-8112	A	19810316		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 61857	IC	G01N033-54

AB A method is described for the determination of antigens and haptens (e.g. drugs,

hormones, vitamins) in human or animal body fluids by **latex particle** agglutination immunoassay which consists of mixing the sample with **latex particles** bearing the same antigen or hapten as that determined, with an agglutinator (rheumatoid factor, complement Clq, mouse serum, or ascitic fluid), and with sufficient antibody to cause 40-80% agglutination of the **particles**. The extent of agglutination is then measured by counting the unagglutinated **particles**. A **protease** (e.g. pepsin) and 1 or more chaotropic agents are also added to the sample to remove interfering proteins and nonspecific interactions, resp. Thus, the method was used with an automated system to determine digoxin (I) in serum by using rheumatoid factor as the agglutinator, anti-I IgG, and a I-bovine **serum albumin** (BSA)-**latex** conjugate. The latter was prepared by incubating activated **latex** overnight at 4° with a BSA-I conjugate prepared by the periodate method. The calibration curve extended from 0.4-6.0 µg/L and the results correlated well with those obtained by radioimmunoassay. The method was also used for the determination of TSH.

ST body fluid antigen detn; hapten detn body fluid; immunoassay **latex** agglutination antigen hapten; hormone **latex** agglutination immunoassay; drug **latex** agglutination immunoassay; vitamin **latex** agglutination immunoassay; serum digoxin **latex** agglutination immunoassay; TSH **latex** agglutination immunoassay

IT Complement

RL: ANST (Analytical study)

(Clq, in antigens and haptens determination in animal and human body fluid

by

latex agglutination immunoassay)

IT Body fluid

(antigens and haptens determination in, by **latex** agglutination immunoassay)

IT Pharmaceutical analysis
(determination of, in body fluids of human and animal by **latex**
agglutination immunoassay)

IT Antigens
Haptens
Hormones
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in body fluids of human and animal by **latex**
agglutination immunoassay)

IT Blood analysis
(digoxin determination in, by automated **latex** agglutination
immunoassay)

IT Ascitic fluid
Rheumatoid factors
RL: ANST (Analytical study)
(in antigens and haptens determination in animal and human body fluid by
latex agglutination immunoassay)

IT Blood serum
(in antigens and haptens determination in animal and human body fluids by
latex agglutination immunoassay)

IT Immunochemical analysis
(**latex** agglutination test, for antigens and haptens)

IT 80295-33-6
RL: ANST (Analytical study)
(CIq, in antigens and haptens determination in animal and human body fluid
by
latex agglutination immunoassay)

IT 20830-75-5
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in blood serum by automated **latex** agglutination
immunoassay)

IT 9002-71-5
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in body fluids of animal and human by **latex**
agglutination immunoassay)

IT 9001-75-6 9001-92-7
RL: ANST (Analytical study)
(in antigens and haptens determination in animal and human body fluids by
latex agglutination immunoassay)

IT Pharmaceutical analysis
 (determination of, in body fluids of human and animal by **latex**
 agglutination immunoassay)

IT Antigens
 Haptens
 Hormones
 RL: ANT (Analyte); ANST (Analytical study)
 (determination of, in body fluids of human and animal by **latex**
 agglutination immunoassay)

IT Blood analysis
 (digoxin determination in, by automated **latex** agglutination
 immunoassay)

IT Ascitic fluid
 Rheumatoid factors
 RL: ANST (Analytical study)
 (in antigens and haptens determination in animal and human body fluid by
 latex agglutination immunoassay)

IT Blood serum
 (in antigens and haptens determination in animal and human body fluids by
 latex agglutination immunoassay)

IT Immunochemical analysis
 (**latex** agglutination test, for antigens and haptens)

IT 80295-33-6
 RL: ANST (Analytical study)
 (CIq, in antigens and haptens determination in animal and human body fluid
 by **latex** agglutination immunoassay)

IT 20830-75-5
 RL: ANT (Analyte); ANST (Analytical study)
 (determination of, in blood serum by automated **latex** agglutination
 immunoassay)

IT 9002-71-5
 RL: ANT (Analyte); ANST (Analytical study)
 (determination of, in body fluids of animal and human by **latex**
 agglutination immunoassay)

IT 9001-75-6 9001-92-7
 RL: ANST (Analytical study)
 (in antigens and haptens determination in animal and human body fluids by
 latex agglutination immunoassay)

NSWER 1 OF 5 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
 AN 1993:166109 BIOSIS
 DN PREVL199395087159
 TI A **turbidimetric latex** inhibition immunoassay for
 detergent solubilized lipopolysaccharide: Application to Brucella cells.
 AU Bowden, R. A. [Reprint author]; Van Broeck, J.; Dubray, G.; Limet, J. N.
 CS INRA Centre de Recherches de Tours, Unite de Pathologie Infectieuse
 Immunologie, 37380 Nouzilly, France
 SO Journal of Microbiological Methods, (1992) Vol. 16, No. 4, pp. 297-306.
 CODEN: JMIMDQ. ISSN: 0167-7012.
 DT Article
 LA English
 ED Entered STN: 31 Mar 1993
 Last Updated on STN: 31 Mar 1993
 AB A **turbidimetric latex agglutination**
 -inhibition assay was developed for the estimation of the smooth
 lipopolysaccharide (S-LPS) content in Brucella cells. Proteinase K
 (PK)-digested Brucella cell lysates were distributed in flat-bottom
 multiwell plates and incubated with an anti-S-LPS monoclonal
antibody (mAb). Unbound **antibody** was then titrated by
agglutination of S-LPS-coated **latex particles**,
 in the presence of human rheumatoid factor (IgM anti-IgG) to enhance
agglutination. The percentage of **agglutinated**
particles was measured in a microplate spectrophotometer by
 monitoring the decrease of absorbance at 405 nm. The inhibitory effect of
 sodium dodecyl sulfate (SDS) present in the samples, was prevented by the
 addition of **bovine serum** albumin (BSA). Recovery of
 S-LPS was not influenced by the concentration of the other components of
 the bacterial lysate. Rough LPS (R-LPS) was not detected in contrast to
 O-polysaccharide (O-PS), which was effectively assayed. The intra-assay
 variation coefficient was lower than 5%. The range was suitable to show
 differences in the LPS content between clones of the same Brucella
 vaccinal strain. The same samples could be studied simultaneously by
 sodium dodecylsulfate-polyacrylamide gel electrophoresis (SDS-PAGE).
 CC Biochemistry methods - Lipids 10056
 Biochemistry methods - Carbohydrates 10058
 Biophysics - Methods and techniques 10504
 Pharmacology - Immunological processes and allergy 22018
 Morphology and cytology of bacteria 30500
 Physiology and biochemistry of bacteria 31000
 Microbiological apparatus, methods and media 32000
 Immunology - General and methods 34502
 Immunology - Bacterial, viral and fungal 34504
 IT Major Concepts
 Biochemistry and Molecular Biophysics; Methods and Techniques
 IT Miscellaneous Descriptors
 ANALYTICAL METHOD; IMMUNOLOGIC METHOD; SMOOTH LIPOPOLYSACCHARIDE
 CONTENT; VACCINE STRAIN
 ORGN Classifier
 Gram-Negative Aerobic Rods and Cocci 06500
 Super Taxa
 Eubacteria; Bacteria; Microorganisms
 Organism Name
 gram-negative aerobic rods and cocci
 Brucella
 Taxa Notes
 Bacteria, Eubacteria, Microorganisms

ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1993:208841 CAPLUS

DN 118:208841

ED Entered STN: 29 May 1993

TI A **turbidimetric latex** inhibition immunoassay for detergent-solubilized lipopolysaccharide: application to Brucella cells

AU Bowden, R. A.; Van Broeck, J.; Dubray, G.; Limet, J. N.

CS Lab. Pathol. Infect. Immunol., Inst. Natl. Rech. Agron., Nouzilly, Fr.

SO Journal of Microbiological Methods (1992), 61(4), 297-306

CODEN: JMIMDQ; ISSN: 0167-7012

DT Journal

LA English

CC 9-10 (Biochemical Methods)

AB A **turbidimetric latex agglutination**

-inhibition assay was developed for the estimation of the smooth lipopolysaccharide (S-LPS) content in Brucella cells. Proteinase K (PK)-digested Brucella cell lysates were distributed in flat-bottom multiwell plates and incubated with an anti-S-LPS monoclonal **antibody** (mAb). Unbound **antibody** was then titrated by **agglutination** of S-LPS-coated **latex particles**, in the presence of human rheumatoid factor (IgM anti-IgG) to enhance **agglutination**. The percentage of **agglutinated particles** was measured in a microplate spectrophotometer by monitoring the decrease of absorbance at 405 nm. The inhibitory effect of SDS present in the samples was prevented by the addition of **bovine serum** albumin (BSA). Recovery of S-LPS was not influenced by the concentration of the other components of the bacterial lysate. Rough LPS

(R-LPS)

was not detected in contrast to O-polysaccharide (O-PS), which was effectively assayed. The intra-assay variation coefficient was <5%. The range was suitable to show differences in the LPS content between clones of the same Brucella vaccinal strain. The same samples could be studied simultaneously by SDS-PAGE.

ST **turbidimetry latex** immunoassay lipopolysaccharide Brucella

IT Lipopolysaccharides

RL: ANT (Analyte); ANST (Analytical study)

(detection of, from smooth-phase cells in Brucella melitensis, **turbidimetric latex agglutination** -inhibition assay for)

IT Brucella melitensis

(lipopolysaccharide from smooth-phase cells detection in, **turbidimetric latex agglutination** -inhibition assay for)

IT Temperature effects, biological

(heat, on lipopolysaccharide activity, in Brucella melitensis)